antibiotics in the assumption that the cause is eustachian tube obstruction and middle ear air pressure changes.

Fortunately, many patients recover in spite of this treatment. Those who do not are statistically likely to finally have their hearing tested about one week later, after the most favorable therapeutic interval has already passed. Causes for these losses and their treatments vary, but one factor common in all studies is an impressive correlation between time of diagnosis and prognosis. For example, those discovered within two days of onset have a 50-50 chance for complete recovery. If discovery is delayed until six weeks, chances for even a modest recovery are less than 5 percent.

There are over 15 proposed causes for sudden hearing loss reported, some treatable, some not. The most common causes are considered to be viral infections, intracochlear membrane breaks, vascular spasm, several blood disorders, autoimmune disease, meningitis and syphilis. Treatment depends upon most likely cause, but until this is established by laboratory tests, which should include a cerebrospinal fluid examination in most cases, additional trauma to the ear should be avoided by restricting physical activity for the first few days after onset and by not attempting to forcibly inflate the middle ear.

F. Blair Simmons, m.d.

REFERENCES

Jaffe BF, Maasab HF: Sudden deafness associated with adenovirus infection. N Engl J Med 276:1406-1409, Jun 22, 1967
Simmons FB: Theory of membrane breaks in sudden hearing loss. Arch Otolaryn 88:41-48, Jul 1968
Goodhill V: Oval and round window fistulae in sudden hearing loss. Laryngoscope (in press) 1972

Vertigo in "Whiplash Injuries"

So-called "whiplash injuries" cause many symptoms which seem difficult to explain on the basis of the trauma involved. A large number of these unfortunate patients complain of "dizziness" and, before the availability of electrony-stagmography, were thought to be "crocks" in search of a "cabbage poultice." By using electronystagmography to search for spontaneous and

positional nystagmus, however, at least half of these patients complaining of dizziness can be demonstrated to have pathologic change in the balance system. The pathologic lesion may be in the peripheral labyrinth, eighth nerve, cerebellopontine angle, brain stem, cervical musculature, vertebral arteries, or the intervertebral discs, or any combination thereof. Any patient complaining of "dizziness" after a "whiplash" injury should be subjected to a complete evaluation of his balance system.

W. E. Compere, Jr., m.d.

REFERENCES

Austin D: Trauma as it effects the temporal bone. Laryngoscope 78:938-943, Jun 1968
Compere WE Jr: Electronystagmographic findings in patients with whiplash injuries. Laryngoscope 78:1226-1233, Jul 1968
Pang LQ: The otological aspects of whiplash injuries. Laryngoscope 81:1381-1387, Sep 1971

Posterior Sinus Approach for Nosebleeds

Nasal bleeding may be so profuse and persistent that it taxes both the patient's and the physician's endurance and may endanger the patient's life. The most severe bleeding usually occurs in the posterior nasal area from branches of the internal maxillary artery. Posterior and anterior nasal packing has been the classic treatment of postnasal bleeding and is successful in at least 80 percent of cases. The maxillary sinus approach for ligation of the internal maxillary artery is usually successful in controlling the packing failures.

The antrum is entered similar to a Caldwell-Luc operation under local or general anesthesia, depending on the condition of the patient. The operating microscope permits excellent visualization for removal of the posterior sinus wall and dissection of the internal maxillary artery in the pterygomaxillary space. The internal maxillary artery and all its branches are ligated with neurosurgical clips. Nasal packing can usually be removed immediately.

The indications for this procedure are as follows: (1) Any patient who has required repeated packing for epistaxis; (2) any patient who rebleeds upon removal of the pack; or (3) where the bleeding is not controlled by a well-inserted